

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. – 35. (Cancelled)
36. (Currently Amended) A method for producing a sterile, implantable medical device for in vivo implantation comprising:
  - preparing providing a device substrate ~~for sterilization~~;
  - affixing non-biological elements to the substrate;
  - sterilizing the non-biological elements and the substrate with a gaseous sterilant;
  - affixing biological elements to the substrate;
  - sterilizing the biological elements with a wet sterilant;
  - packaging the substrate, the non-biological and biological elements into a wet buffer; and
  - sterilizing the substrate, the non-biological and biological elements packaged in the wet buffer using light.
37. (Original) The method of Claim 36, wherein sterilizing the non-biological elements and the substrate with a gaseous sterilant comprises sterilizing the non-biological elements and the substrate with ethylene oxide.
38. (Original) The method of Claim 36, wherein biological elements are affixed to the substrate after sterilizing the non-biological elements and the substrate with a gaseous sterilant.
39. (Original) The method of Claim 36, wherein sterilizing the biological elements with a wet sterilant comprises sterilizing the biological elements with glutaraldehyde.
40. (Original) The method of Claim 36, wherein sterilizing the substrate, the non-biological and biological elements packaged in the wet buffer using light comprises sterilizing the substrate, the non-biological and biological elements packaged in the wet buffer using a broad spectrum pulse light.

41. (Original) The method of Claim 36, wherein sterilizing the biological elements with a wet sterilant comprises:

- preparing a sterilization chamber;
- preparing the wet sterilant;
- pre-warming the wet sterilant;
- loading sensors into the chamber;
- exposing the sensors to the wet sterilant;
- rinsing the sensors a first time; and
- rinsing the sensors a second time.

42. (Original) The method of Claim 41 wherein rinsing the sensors a first time and a second time comprises rinsing the sensors with a bicarbonate buffer.

43. (Original) The method of Claim 36, further comprising implanting the device in vivo.

44. (Original) The method of Claim 43, wherein implanting the device in vivo comprises implanting the device in vivo without rinsing.